(1) AMENDED CLAIMS (ARTICLE 41 PCT)

1. Device converting thermal energy into kinetic energy,related to the group of thermodynamic machines using adiabatic compressors,adiabatic expanders and heat exchangers and converting thermal energy into kinetic one by means of an available outside heat source c h a r a c t e r i z e d by the fact that:

(a) this device uses a rarefied gas in a novel three-phase cycle (29) of which the first phase (1---2) is an adiabatic expansion, the second phase (2---0) is an isobaric expansion and the third one,dotted line (0---1), is a spontaneous isothermal gas aggregation, equivalent to ideal isothermal compression. .

(b) Said device consists of a vacuum glasvessel (1), equipped with an adiabatic expander (5),performing phase (1---2) and a heat exchanger (6,7),performing phase (2---0),and divided into rooms (2) and (3) by a region (4) containing numerous slots (26),performing phase (0---1) and having:

(i) diverging inner surfaces(26),

(ii) microscopic cross section comparable with the mean free path of the molecules and

(iii) a length of 20 mm (30),

said slots being grouped together as spacings (s) between adjacent parallel triangular rods (19),into standard small modules (m) (13), and arranged in a parallel layout with regard to the gas flow, as shown by the arrows (31).

(c) Said device works by drawing heat only from the anbient air, without any other outside heat source.
